WHO updates

THE IMMUNIZATION GAP

World Health Organization

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Clean Care is Safer Care

- Clean Care is Safer Care
- Save Lives: Clean Your Hands
- The evidence for clean hands
- Campaigning countries
- Information centre
- News and events

Background to Clean Care is Safer Care

In previous years, WHO Global Patient Safety Challenges were born from calls from around the world on specific patient safety issues, and were also reflected in global campaigns, which have brought together expertise and evidence to raise awareness, and to catalyze political and professional commitment on these important topics. They have also generated knowledge, recommendations and actions to improve the safety of patients receiving care globally.

The focus and objectives of Clean Care is Safer Care

The first of these Challenges, Clean Care is Safer Care, which was launched in 2005, targeted the important aspect of reducing health care-associated infections (HCAIs). HCAI is the most frequent harmful event in health-care delivery and occurs

In 10 years, *Clean Care is Safer Care* has evolved to become the ***Infection Control Programme*** hosted by the new WHO HQ Service Delivery and Safety department

Continuing to aim to reduce healthcare-associated infection worldwide

1st GPSC Change Model
3 main objectives

Burden of HCAI **Stakeholders' engagement**	1. Awareness raising
Country pledges **National campaigns**	2. Mobilising nations
Implementation strategies	3. Technical guidelines and tools

Awareness raising on HAI endemic burden

Allegranzi B et al.
Lancet 2011;377:228-41

Articles

Burden of endemic health-care-associated infection
developing countries: systematic review and meta-

Benedetta Allegranzi, Sepideh Bagheri Nejad, Christophe Combescure, Wilco Graafmans, Homa Attar, Liam Donaldson, Did

Summary

Background Health-care-associated infection is the most frequent result of unsafe patient care
data are available from the developing world. We aimed to assess the epidemiology of endemic hea
infection in developing countries.

Methods We searched electronic databases and reference lists of relevant papers for articles pub
Studies containing full or partial data from developing countries related to infectio
incidence—including overall health-care-associated infection and major infection sites, and the
cause—were selected. We classified studies as low-quality or high-quality according to predefi
were pooled for analysis.

Findings Of 271 selected articles, 220 were included in the final analysis. Limited data were re
regions and many countries were not represented. 118 (54%) studies were low quality. In general, inf
reported in high-quality studies were greater than those from low-quality studies. Prevalence of hea
infection (pooled prevalence in high-quality studies, 15·5 per 100 patients [95% CI 12·6–18·9]) was
proportions reported from Europe and the USA. Pooled overall health-care-associated infectio
intensive-care units was 47·9 per 1000 patient-days (95% CI 36·7–59·1), at least three times as
reported from the USA. Surgical-site infection was the leading infection in hospitals (pooled cur
5·6 per 100 surgical procedures), strikingly higher than proportions recorded in developed countr
bacilli represented the most common nosocomial isolates. Apart from meticillin resistance, noted
Staphylococcus aureus isolates (in eight studies), very few articles reported antimicrobial resistance.

Interpretation The burden of health-care-associated infection in developing countries is high. Our
need to improve surveillance and infection-control practices.

Funding World Health Organization.

Introduction

Health-care-associated infections are deemed the most frequent adverse event threatening patients' safety worldwide.[1,2] However, reliable estimates of the global burden are hampered by a paucity of data adequately describing endemic infections at national and regional levels, particularly in resource-limited settings.[3] In countries where less than 5% of the gross national product is spent on health care, and workforce density is less than five per 1000 population,[3] other emerging health problems and diseases take priority.[4] The epidemiological gap leading to the absence of reliable estimates of the global burden is mainly because surveillance of health-care-associated infection expends time and resources and needs expertise in study design, data collection, analysis, and interpretation. Very few countries of low and middle income have national surveillance systems for health-care-associated infections. Data from the International Nosocomial Infection Control Consortium,[5] and findings of two systematic reviews on hospital-acquired neonatal infections[6] and ventilator-associated pneumonia,[7] suggested not only that risks of health-care-associated infection are significantly higher in developing countries but also that the effect on patient systems is severe and greatly underes

The aim of this systematic review ts to assess the burden of endemic heal infection in developing countries available data from published studies We also aim to investigate const surveillance of health-care-associa resource-limited settings and ider for improvement.

Methods

Search strategy and selection criteria

We undertook a literature search ar according to a protocol designed befo We aimed to identify studies on th health-care-associated infection in dev with a particular focus on the most infections—urinary-tract infection, sur bloodstream infection, hospital-acquire ventilator-associated pneumonia. We for reports published between Ja December, 2008, with no language res comprehensive list of terms [panel 1]

www.thelancet.com Published online December 10, 2010 DOI:10.1016/S0140-6736(10)61458-4

World Health Organization | Patient Safety

Published on 5 May 2011

http://www.who.int/gpsc/en/

Report on the Burden of Endemic Health Care-Associated Infe Worldwide

Clean Care is Safer Care

Systematic reviews

Health-care-associated infection in Africa: a systematic review

Sepideh Bagheri Nejad,[a] Benedetta Allegranzi,[a] Shamsuzzoha B Syed,[b] Benjamin Ellis[c] & Didier Pittet[d]

Objective To assess the epidemiology of endemic health-care-associated infection (HAI) in Africa.
Methods Three databases (PubMed, the Cochrane Library, and the WHO regional medical database for Africa) were searched to identify studies published from 1995 to 2009 on the epidemiology of HAI in African countries. No language restriction was applied. Available abstract books of leading international infection control conferences were also searched from 2004 to 2009.
Findings The eligibility criteria for inclusion in the review were met by 19 articles, only 2 of which met the criterion of high quality. Four relevant abstracts were retrieved from the international conference literature. The hospital-wide prevalence of HAI varied between 2.5% and 14.8%; in surgical wards, the cumulative incidence ranged from 5.7% to 45.8%. The largest number of studies focused on surgical site infection, whose cumulative incidence ranged from 2.5% to 30.9%. Data on causative pathogens were available from a few studies only and highlighted the importance of Gram-negative rods, particularly in surgical site infection and ventilator-associated pneumonia.
Conclusion Limited information is available on the endemic burden of HAI in Africa, but our review reveals that its frequency is much higher than in developed countries. There is an urgent need to identify and implement feasible and sustainable approaches to strengthen HAI prevention, surveillance and control in Africa.

Abstracts in عربي, 中文, Français, Русский and Español at the end of each article.

Introduction

Health-care-associated infection (HAI) is a major global safety concern for both patients and health-care professionals.[1–3] HAI is defined as an infection occurring in a patient during the process of care in a hospital or other health-care facility that was not manifest or incubating at the time of admission. This includes infections acquired in the hospital and any other setting where patients receive health care and may appear even after discharge. HAI also includes occupational infections among facility staff.[1] These infections, often caused by multiresistant pathogens, take a heavy toll on patients and their families by causing illness, prolonged hospital stay, potential disability, excess costs and sometimes death.[4–6]

The burden of HAI is already substantial in developed countries, where it affects from 5% to 15% of hospitalized patients in regular wards and as many as 50% or more of patients in intensive care units (ICUs).[7,8] In developing countries, the magnitude of the problem remains underestimated or even unknown largely because HAI diagnosis is complex and surveillance activities to guide interventions require expertise and resources.[6] Surveillance systems exist in some developed countries and provide regular reports on national trends of endemic HAI,[9] such as the National Healthcare Safety Network of the United States of America or the German hospital infection surveillance system. This is not the case in most developing countries[10] because of social and health-care system deficiencies that are aggravated by economic problems. Additionally, overcrowding and understaffing in hospitals result in inadequate infection control practices, and a lack of infection control policies, guidelines and trained professionals also adds to the extent of the problem.

This review provides a general overview of the endemic burden of HAI in Africa based on the information available in the scientific literature. It also identifies information gaps, examines differences in HAI epidemiology between developed and developing countries and highlights the possible role of the World Health Organization (WHO) in preventing HAI.

Methods

Search strategy and selection criteria

A literature search was performed from January 1995 to December 2009 with no language restriction to retrieve publications on the epidemiology of the most common HAIs in African countries: health-care-associated urinary tract infection (HA-UTI), surgical site infection (SSI), hospital-acquired pneumonia/ventilator-associated pneumonia and health-care-associated bloodstream infection. PubMed was searched using a combination of the following keywords, including "cross-infection" as the MeSH term: "nosocomial infection", "hospital-acquired", "incidence", "prevalence" and "rate" together with the individual country names. The Cochrane Library was searched for any relevant review papers. Reference lists of retrieved articles were hand searched for additional studies.

A separate search was run in the WHO regional medical database for Africa, African Index Medicus, using a shorter list of essential keywords and with no time restriction. The abstract books of the following international conferences were also searched from 2004 to 2009: Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), Annual Congress of the Society for Healthcare Epidemiology of America (SHEA), European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), International Federation of Infection Control

Bagheri Nejad S, et al. Bull OMS 2011;89:757-765

Political commitment is essential to achieve improvement in infection control

- Ministerial pledges to the 1st Global Patient Safety Challenge

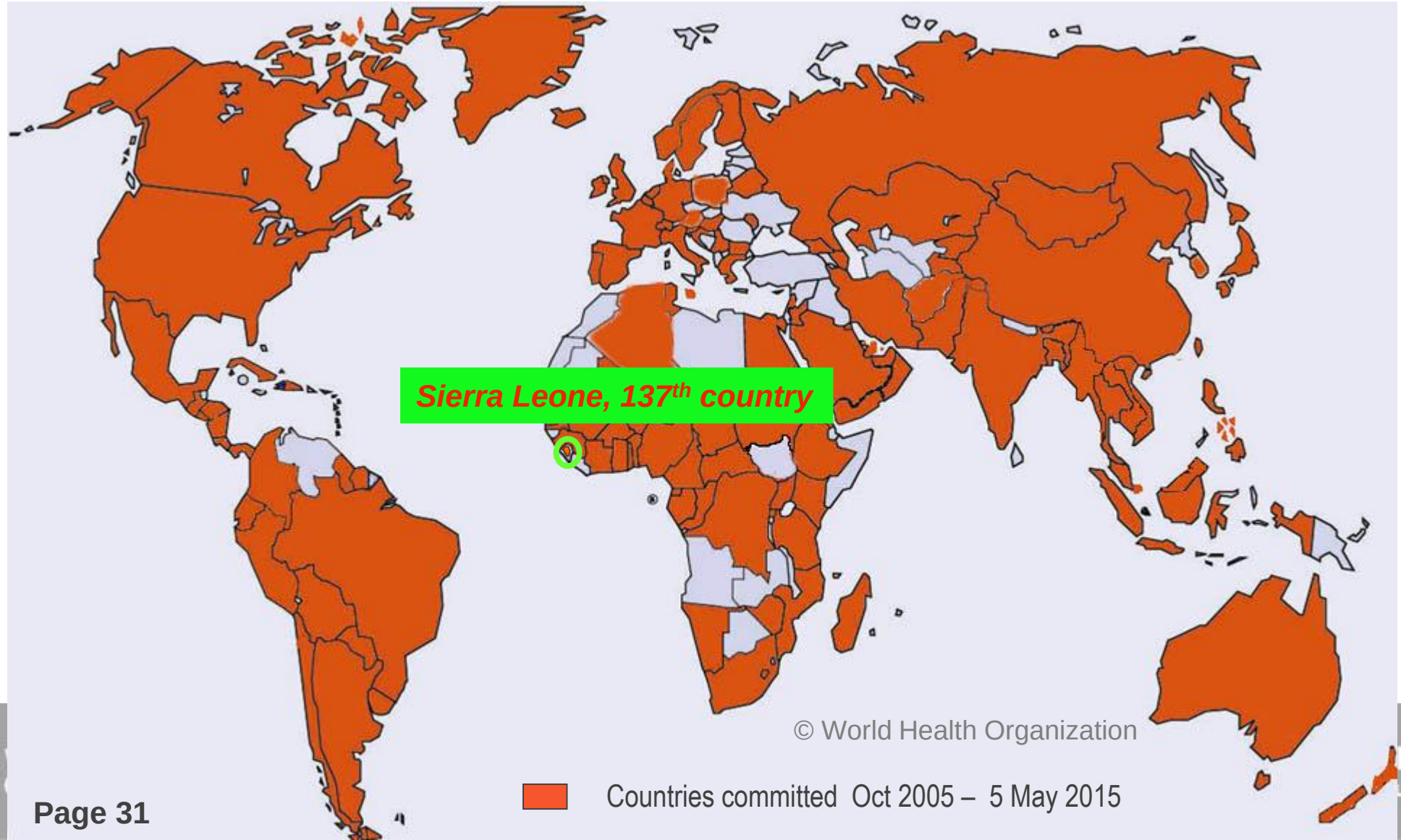
I resolve to work to reduce health care-associated infection (HCAI) through actions such as:

- acknowledging the importance of HCAI;
- hand hygiene campaigns at national or sub-national levels;
- sharing experiences and available surveillance data, if appropriate;
- using WHO strategies and guidelines…

Bethesda Hospital

137 countries committed to address health care-associated infection

World population coverage : > 93 %

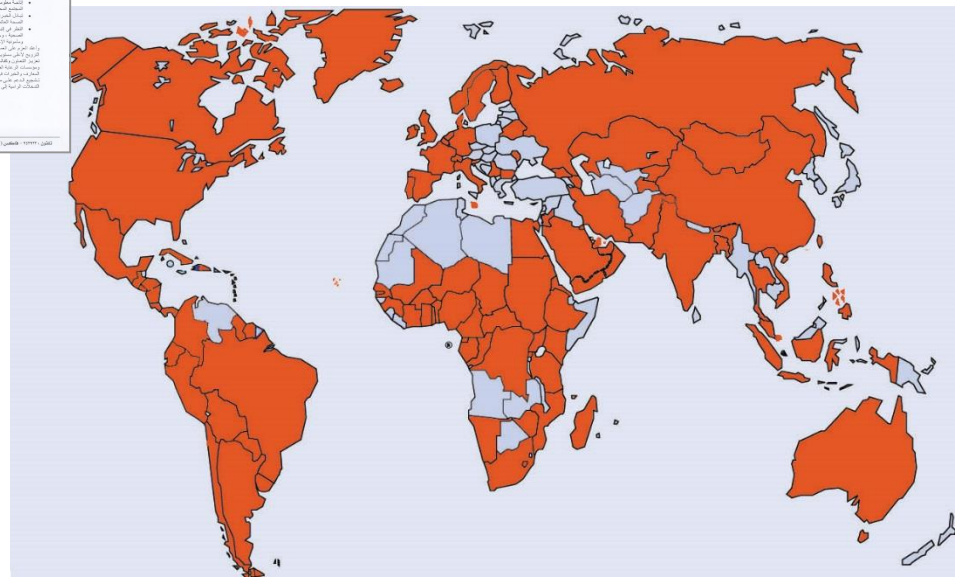


On 5 May 2015, His Excellency the Sierra Leone Minister of Health and Sanitation pledges to fight against healthcare-associated infections

in memory of the fallen heroes of Sierra Leone Health Sector due to Ebola Viral Disease

Adoption and adaptation of Clean Care is Safer Care worldwide

From country pledges



- … to patient point of care

Implementation levels

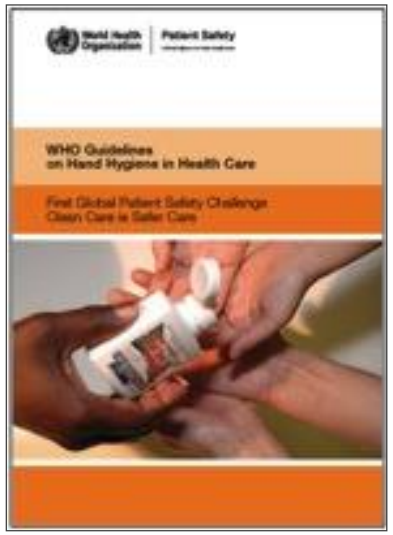
First Global Patient Safety Challenge

Global level

Facility-level: point of care

Implementation strategy and toolkit for the WHO Guidelines on Hand Hygiene in Health Care

Knowledge & evidence → **Action**



What is the WHO Multimodal Hand Hygiene Improvement Strategy?

Based on the evidence and recommendations from the WHO Guidelines on Hand Hygiene in Health Care (2009),

made up of

5 core components, to improve hand hygiene in health-care settings

ONE System change
Alcohol-based handrubs at point of care
and access to safe continuous water supply, soap and towels

+

TWO Training and education
Providing regular training to all health-care workers

+

THREE Evaluation and feedback
Monitoring hand hygiene practices, infrastructure, perceptions, & knowledge, while providing results feedback to health-care workers

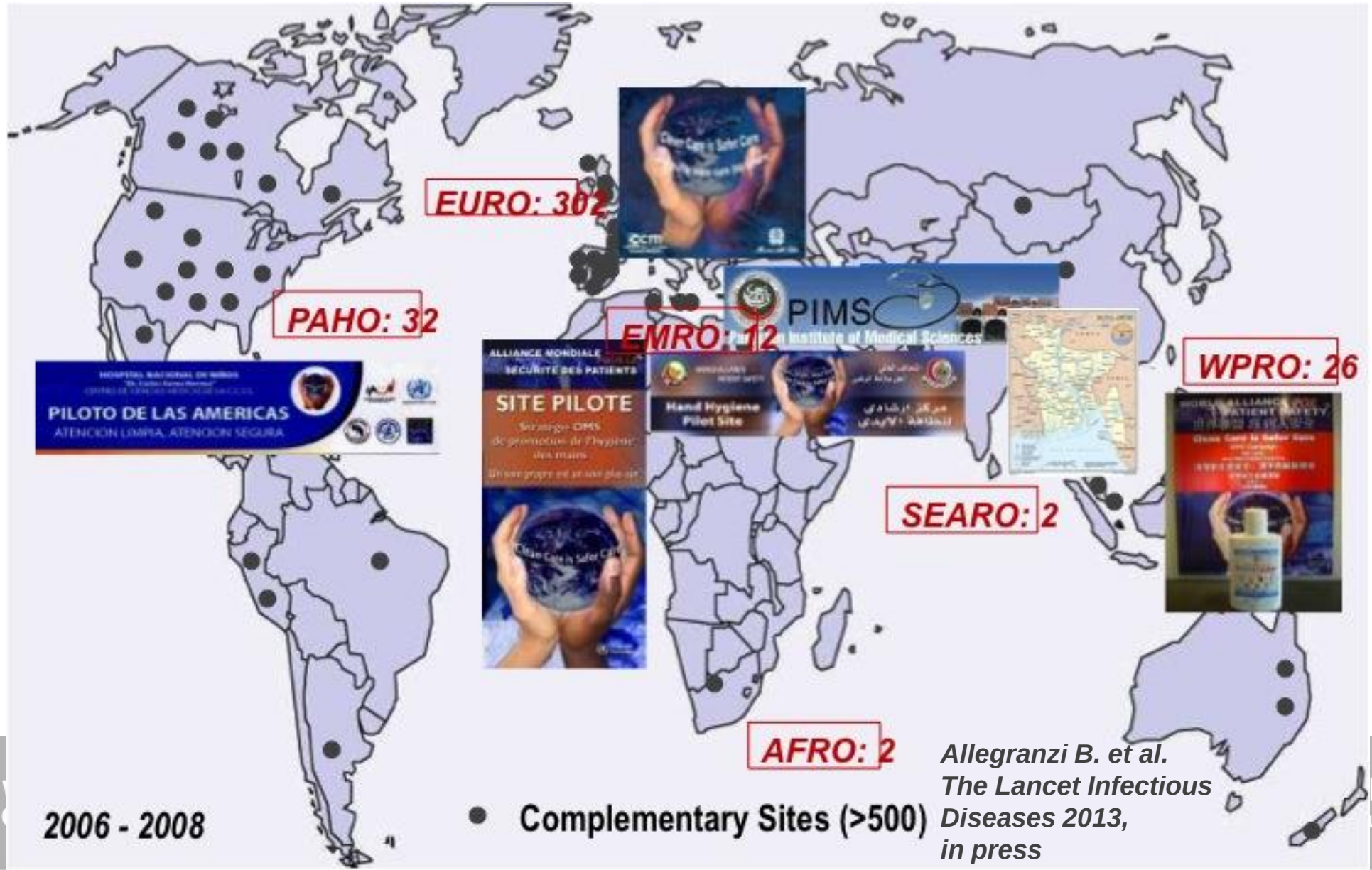
+

FOUR Reminders in the workplace
Prompting and reminding health-care workers

+

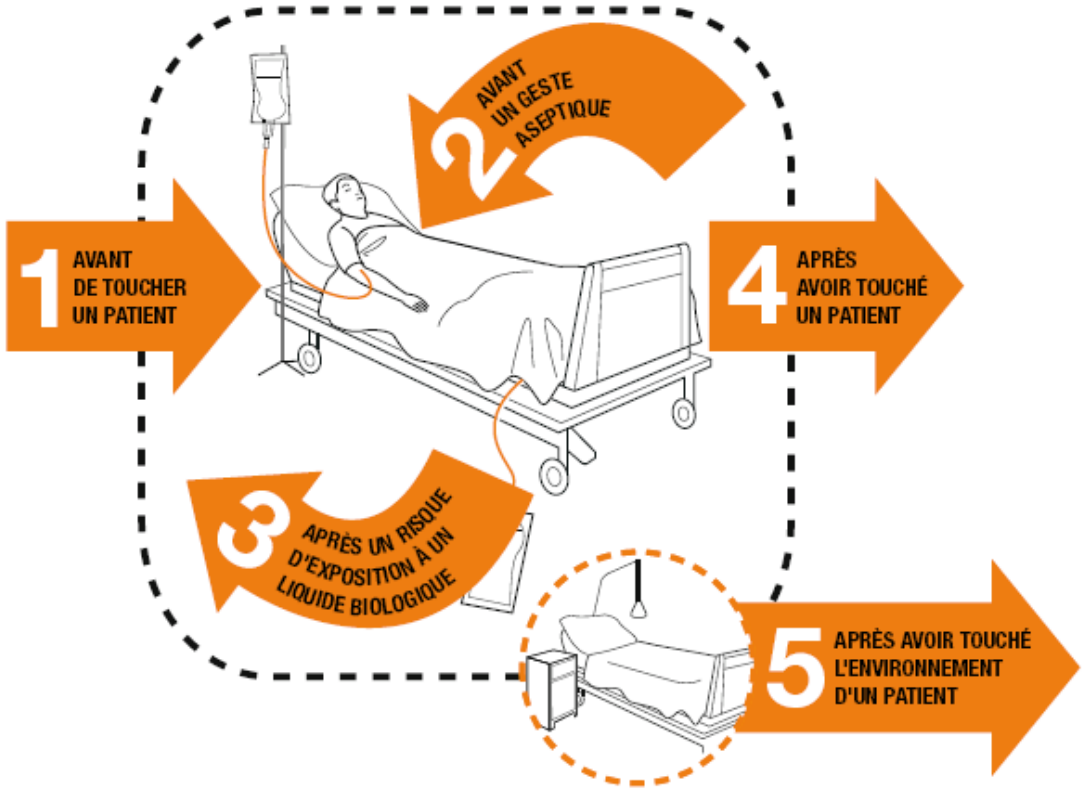
FIVE Institutional safety climate
Individual active participation, institutional support, patient participation

Field Testing of the WHO Guidelines (2006-2008)



Allegranzi B. et al. The Lancet Infectious Diseases 2013, in press

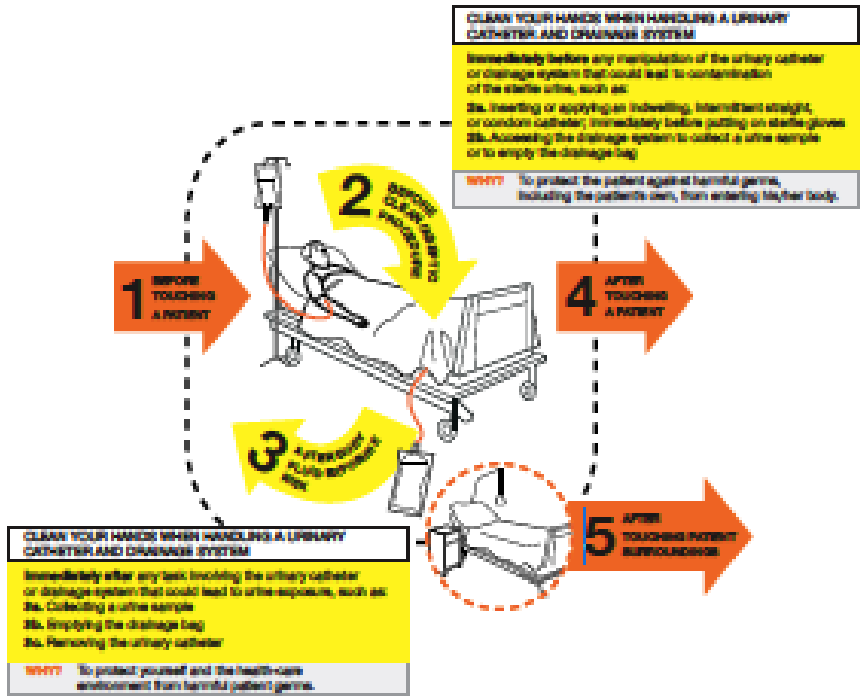
A successful branding



2014

My 5 Moments for Hand Hygiene

Focus on caring for a patient with a Urinary Catheter



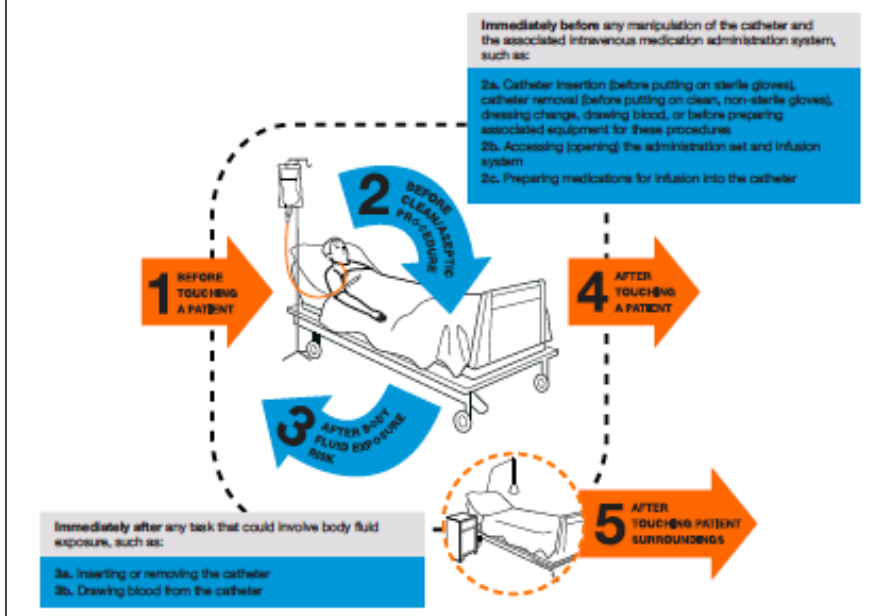
5 KEY ADDITIONAL CONSIDERATIONS FOR A PATIENT WITH A URINARY CATHETER

- Make sure that there is an appropriate indication for the indwelling urinary catheter.
- Use a closed urinary drainage system, and keep it closed.
- Insert the catheter aseptically using sterile gloves.
- Assess the patient at least daily to determine whether the catheter is still necessary.
- Patients with indwelling urinary catheters do not need antibiotics (including for asymptomatic bacteriuria), unless they have a documented infection.

World Health Organization | SAVE LIVES Clean Your Hands | No Action Today No Cure Tomorrow

My 5 Moments for Hand Hygiene

Focus on caring for a patient with a central venous catheter



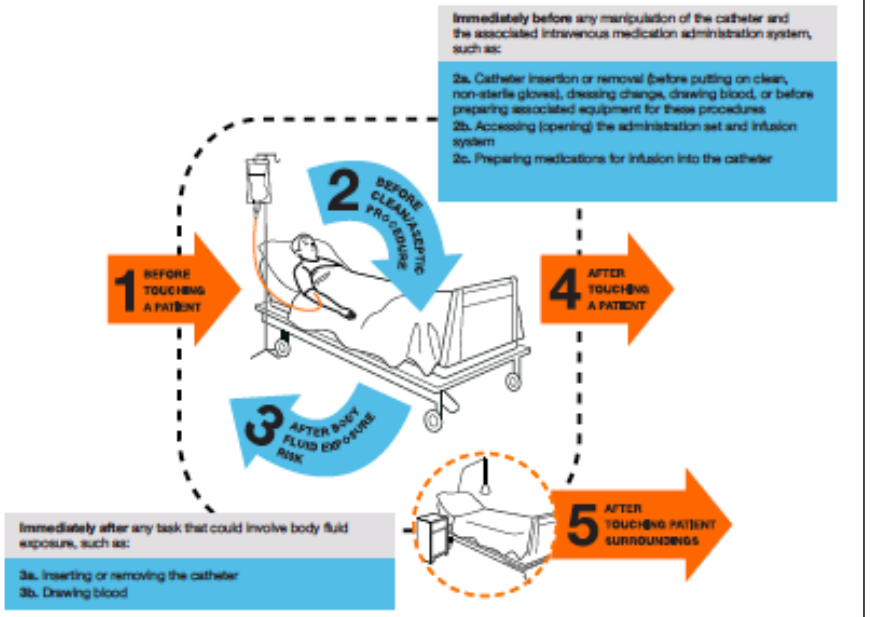
Key additional considerations for central intravenous catheters

1. Indication: Ensure that a central intravenous catheter is indicated. Remove the catheter when no longer needed/clinically indicated.
2. Insertion/maintenance/removal
2.1 Avoid inserting catheters into the femoral vein.
2.2 Prepare clean skin with an antiseptic (alcohol-based 2% chlorhexidine-gluconate preferred) before insertion.
2.3 Use full sterile barrier precautions during insertion (cap, surgical mask, sterile gloves, sterile gown, large sterile drape).
2.4 Replace gauze-type dressings every 2 days and transparent dressings every 7 days; replace dressings whenever visibly soiled.
2.5 Change tubing used to administer blood, blood products, chemotherapy, and fat emulsions within 24 hours of infusion start. Consider changing all other tubing every 96 hours.
2.6 Use aseptic procedure (with non-touch technique) for all catheter manipulations.
2.7 "Scrub the hub" with alcohol-based chlorhexidine-gluconate for at least 15 seconds.
3. Monitoring: Record time and date of catheter insertion, removal and dressing change, and condition (visual appearance) of the catheter skin site every day.

World Health Organization | SAVE LIVES Clean Your Hands | Clean Care is Safer Care 2005-2015

My 5 Moments for Hand Hygiene

Focus on caring for a patient with a peripheral venous catheter



Key additional considerations for peripheral intravenous catheters

1. Indication: Ensure that a peripheral venous catheter is indicated. Remove the catheter when no longer necessary/clinically indicated.
2. Insertion/maintenance/removal
2.1 Prepare clean skin with an antiseptic (70% alcohol, tincture of iodine, an iodophor, or alcohol-based 2% chlorhexidine gluconate) before catheter insertion.
2.2 Wear clean, non-sterile gloves and apply an aseptic procedure (with non-touch technique) for catheter insertion, removal, and blood sampling.
2.3 Replace any dry gauze-type dressings every 2 days.
2.4 Consider scheduled catheter change every 96 hours.
2.5 Change tubing used to administer blood, blood products, chemotherapy, and fat emulsions within 24 hours of infusion start. Consider changing all other tubing every 96 hours.
3. Monitoring: Record time and date of catheter insertion, removal and dressing change, and condition (visual appearance) of catheter site every day.

World Health Organization | SAVE LIVES Clean Your Hands | Clean Care is Safer Care 2005-2015

My 5 Moments for Hand Hygiene

Focus on caring for a patient with an endotracheal tube

Immediately before any manipulation of the endotracheal tube and any respiratory tract care, such as:

2a. Performing nasal care, oral care, or securing the endotracheal or tracheostomy tube (before putting on clean, non-sterile gloves)

2b. Endotracheal aspiration or sampling of the respiratory tract through bronchoalveolar lavage or mini-bronchoalveolar lavage (before putting on sterile gloves)

Immediately after any task that could involve body fluid exposure, such as:

3a. Performing nasal care, oral care, or securing the endotracheal or tracheostomy tube

3b. Endotracheal aspiration, sampling of the respiratory tract, or after any other contact with mucous membranes, respiratory secretions, or objects contaminated with respiratory secretions

3c. Intubating or extubating the patient

Key additional considerations for adult patients with endotracheal tubes

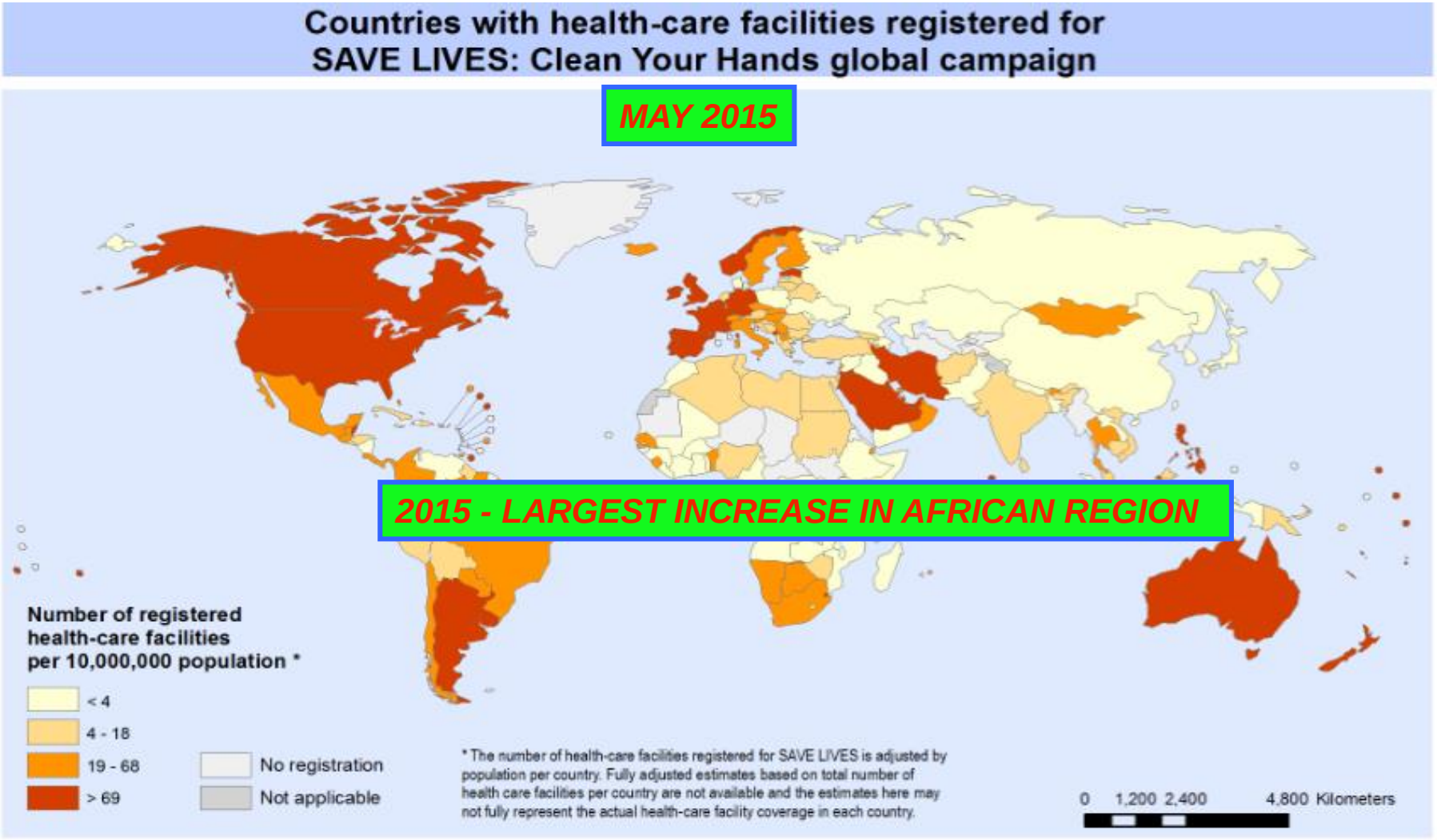
- Avoid intubation and use non-invasive ventilation whenever appropriate.
- If possible, provide endotracheal tubes with subglottic secretion drainage ports for patients likely to require more than 48 hours of intubation.
- Elevate the head of the bed to 30°–45°.
- Manage ventilated patients without sedatives whenever possible.
- Assess readiness for extubation every day by performing spontaneous breathing trials with sedatives turned off (in patients without contraindications).
- Perform regular oral care aseptically using clean, non-sterile gloves.
- Facilitate early exercise and mobilization to maintain and improve physical condition.
- Change the ventilator circuit only if visibly soiled or malfunctioning.

World Health Organization | SAVE LIVES Clean Your Hands | Clean Care is Safer Care 2005-2015

World Health Organization

SAVE LIVES
Clean Your Hands

Countries with health-care facilities registered for SAVE LIVES: Clean Your Hands global campaign



Data Source: World Health Organization
Map Production: Health Statistics and Information Systems (HSI)
World Health Organization

World Health Organization

WHO Service Delivery & Safety dept – Clean Care is Safer Care
Focus in 2014-2015 (1)

- Support for and consolidation of **hand hygiene improvement** through SAVE LIVES: Clean Your Hands campaign, *CleanHandsNet,* and POPS – **5 May 2015**
- **Infection prevention and control (IPC) for the Ebola outbreak**
  - *Response*
  - *Recovery*
  - *Resilience*
- **Country support** for capacity building and strengthening the core components of IPC programmes
- **Burden of HAI** worldwide – **SSI burden update**

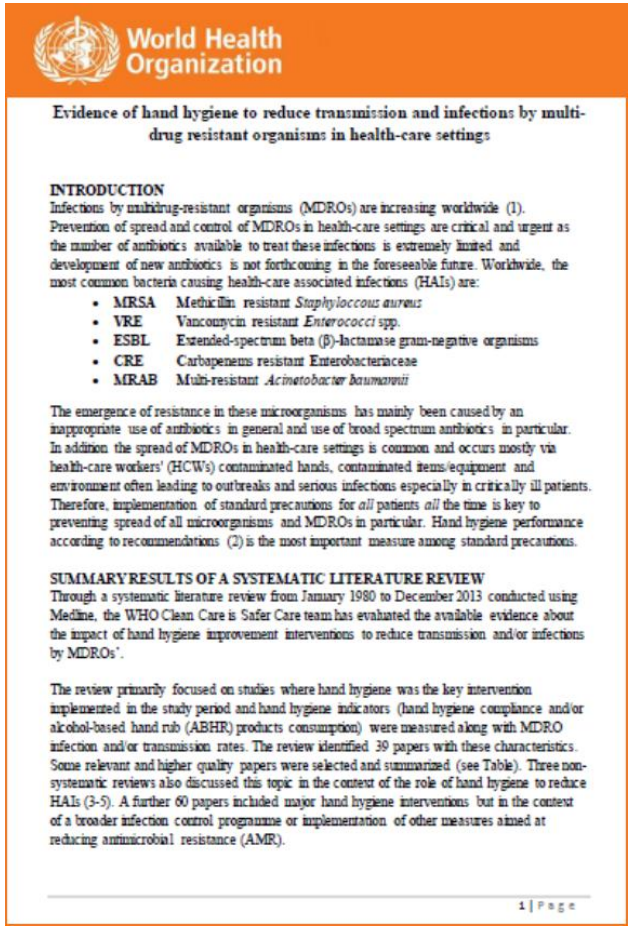
WHO Service Delivery & Safety dep – Clean Care is Safer Care

Focus in 2014-2015 (2)

- **Prevention of surgical site infection**
  - ✓ *New Guidelines under development*
  - ✓ *Surgical Unit-based Safety Programme (SUSP) project in African hospitals*
  - ➢ *Manual on sterilization and safe processing of medical devices (launch in June 2015)*
- **Injection safety** new global initiative
  - ✓ *New Policy launched in February 2015*
  - ➢ *New Global Injection Safety campaign (to be launched)*
- **AMR prevention and control in health care**
  - ✓ *AMR IPC expertise provided in consultations*
  - ✓ *AMR hand hygiene resources produced for 5 May 2014*

5 May 2015: *hand hygiene* is the entrance door to strengthening health-care systems and delivery

Impact of hand hygiene to reduce transmission and infections by MDROs in health-care settings a systematic literature review



World Health Organization

Evidence of hand hygiene to reduce transmission and infections by multi-drug resistant organisms in health-care settings

INTRODUCTION

Infections by multidrug-resistant organisms (MDROs) are increasing worldwide (1). Prevention of spread and control of MDROs in health-care settings are critical and urgent as the number of antibiotics available to treat these infections is extremely limited and development of new antibiotics is not forthcoming in the foreseeable future. Worldwide, the most common bacteria causing health-care associated infections (HAIs) are:

- **MRSA** Methicillin resistant *Staphyloccous aureus*
- **VRE** Vancomycin resistant *Enterococci* spp.
- **ESBL** Extended-spectrum beta (β)-lactamase gram-negative organisms
- **CRE** Carbapenems resistant Enterobacteriaceae
- **MRAB** Multi-resistant *Acinetobacter baumannii*

The emergence of resistance in these microorganisms has mainly been caused by an inappropriate use of antibiotics in general and use of broad spectrum antibiotics in particular. In addition the spread of MDROs in health-care settings is common and occurs mostly via health-care workers' (HCWs) contaminated hands, contaminated items/equipment and environment often leading to outbreaks and serious infections especially in critically ill patients. Therefore, implementation of standard precautions for *all* patients *all* the time is key to preventing spread of all microorganisms and MDROs in particular. Hand hygiene performance according to recommendations (2) is the most important measure among standard precautions.

SUMMARY RESULTS OF A SYSTEMATIC LITERATURE REVIEW

Through a systematic literature review from January 1980 to December 2013 conducted using Medline, the WHO Clean Care is Safer Care team has evaluated the available evidence about the impact of hand hygiene improvement interventions to reduce transmission and/or infections by MDROs'.

The review primarily focused on studies where hand hygiene was the key intervention implemented in the study period and hand hygiene indicators (hand hygiene compliance and/or alcohol-based hand rub (ABHR) products consumption) were measured along with MDRO infection and/or transmission rates. The review identified 39 papers with these characteristics. Some relevant and higher quality papers were selected and summarized (see Table). Three non-systematic reviews also discussed this topic in the context of the role of hand hygiene to reduce HAIs (3-5). A further 60 papers included major hand hygiene interventions but in the context of a broader infection control programme or implementation of other measures aimed at reducing antimicrobial resistance (AMR).

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World Health Organization

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Media centre

Good hand hygiene by health workers protects patients from drug resistant infections

News release

Share Print

2 MAY 2014 | GENEVA - On Hand Hygiene Day (5 May), WHO urges health workers to practice good hand hygiene when caring for patients, to protect them from contracting infections in health facilities. Initial results from a new WHO global survey confirm that these infections are often resistant to the antibiotics used to treat them.

Healthcare-associated infections usually occur when germs are transferred by health-care providers' hands touching the patient. Of every 100 hospitalized patients, at least 7 in high-income and 10 in low-/middle-income countries will acquire a healthcare-associated infection. Among critically ill and vulnerable patients in intensive care units, that figure rises to around 30 per 100 . Every year, hundreds of millions of patients around the world are affected by healthcare-associated infections, a high proportion of which is caused by germs that are resistant to antimicrobial drugs.

Related links

SAVE LIVES: Clean Your Hands - WHO's global annual campaign 5 May 2014

5 May 2014 - Global Surveys

The evidence for clean hands

Five Moments for Hand Hygiene

About SAVE LIVES: Clean Your Hands

Audio and video files on hand hygiene

Antimicrobial resistance: global report on surveillance 2014

http://www.who.int/gpsc/5may/EN_PSP_GPSC1_5May_2014/en/

Summary results

- From Jan. 1980 to Dec. 2013
- **39 studies** on hand hygiene as the key intervention implemented in the study period and including data about impact on MDROs' infection and/or transmission rates, as well as on hand hygiene indicators, were identified
- **Only 4/39** studies failed to demonstrate an impact of hand hygiene interventions or improvement in the MDRO's infection and/or colonization

  One of these studies *did not show any significant improvement of hand hygiene compliance* thus explaining the failure to reduce infections, while *another study* was a ***low/quality*** *retrospective study*
- **Additional 60 studies** investigated the impact of hand hygiene (HH) to reduce MDRO's infections as part of interventions including other infection control measures

Awareness raising - a social marketing strategy #safeHANDS and country engagement

Bethesda Hospital

Are you ready for 5 May 2015 ?

Bethesda Hospital

Are you ready for 5 May 2015 ?

LIVES
ur Hands


Je mérite des soins propres
#safeHANDS
MALOU 94 ans

Families pledging for #safeHANDS for their parents


Yo proporciono una atención limpia
#safeHANDS
#safeHANDS
Safety Starts Here.
#safeHANDS
I promote clean care
#safeHANDS
Netcare


#safeHANDS
I provide clean care
#safeHANDS
HEALTH SYSTEM
AT THE RIGHT MOMENTS
#safeHANDS
#safeHANDS
#safeHANDS
#safeHANDS
@IPCT_RDE
Our IPCT colleagues @DPT_NHS
promoting Global #handhygiene Day
ready for next week's activities
#safeHANDS #IPS
#safeHANDS


info
Clean Hands Save Lives - 30.04.2015
I provide clean care
#safeHANDS
kate.ryan
#safeHANDS pics
@hospitalloayza
Campaña por atención segura en
Hospital Loayza #manosLimpias
@hospitalloayza #safehands
#manosseguras #minsa @who


World Heart Day
#safeHANDS


I promote clean care
#safeHANDS
Eman Ali - Quality Director


#safeHANDS


I promote clean care
#safeHANDS


I promote clean care
#safeHANDS


I promote clean care
#safeHANDS


#safeHANDS


#safeHANDS


#safeHANDS

Hong Kong
5 May 2014

1st Hand Sanitizing Relay Guinness World Record on Compliance with Hand Hygiene
Hong Kong Baptist Hospital

Get ready & Participate from 5 May to 5 Sept 2015

Hong Kong, 5 May 2014
START POINT


tal - Block D
Road, Kowloon
Finish
終點

Key lessons learned for infection prevention and control (IPC) from the Ebola outbreak

- Absence of IPC basic measures and infrastructures both in the community and in healthcare settings led to the unprecedented situation of this outbreak
- The lack of access to safe water, of proper hygiene, and poor sanitation contributed to the propagation of the virus both the community and healthcare facilities

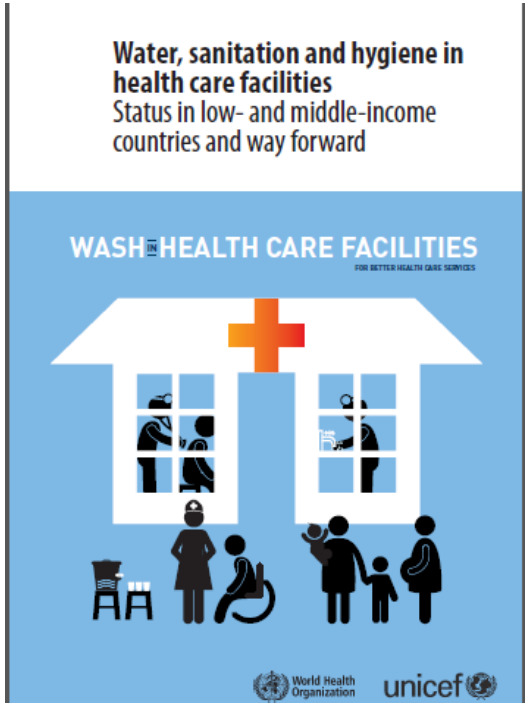
Ebola Recovery Assessment
Water, sanitation, and hygiene

- Lack of access to water, sanitation, and poor hygiene practices were problems pre-Ebola, exacerbated the outbreak, and will remain problems post-Ebola

Indicator	Guinea	Liberia	Sierra Leone
Water supply coverage	**92%** (urban areas; very poor reliability)	**65%** (rural areas; 50% fully functioning year-round)	**60%**
Access to improved sanitation	**18.9%**	**16.8%**	**13%**

Global report-availability of soap and water or handrubs is sub-optimal

- Review based on data from 54 countries, representing over 66,000 health care facilities
- Globally, 35% of facilities have no soap and water or handrubs for hand hygiene
- No data on functionality or frequency of use
- Other indicators similarly low: 38% of facilties have no water, 19% have no sanitation and 42% lack a system for safe disposal of health care waste



WHO/UNICEF, 2015. Water, sanitation and hygiene in health care facilities: status in low- and middle-income countries and way forward.
http://www.who.int/water_sanitation_health/publications/wash-health-care-facilities/en/

World Health Organization

Beyond handwashing-preventing infection requires a comprehensive approach

- Water Quality *(safe management; no fecal contamination)*
- Water Quantity *(5-300 liters/person/day depending on type of facility and services provided)*
- Excreta disposal and management
- Greywater disposal and management
- Health care waste management
- Food storage and preparation
- Control of vectorborne disease
- Hygiene promotion

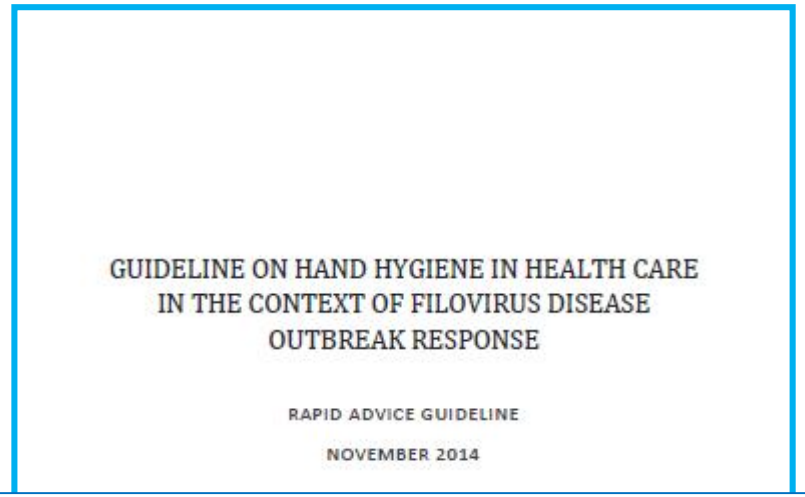
WHO, 2008. *Essential environmental health standards in health care*. World Health Organization, Geneva. http://www.who.int/water_sanitation_health/hygiene/settings/ehs_hc/en/

World Health Organization

Global Action Plan to address water, sanitation and hygiene (WASH) in health care facilities

- WHO and UNICEF hosted global meetings in 2014 (Madrid) and 2015 (Geneva) to develop basis for plan
- WASH important input for, *not separate from,* infection prevention and control and the **Clean Care is Safer Care** efforts
- Main elements of draft plan include:
  - National policies, standards and targets
  - Financing and human resources-improving WASH services
  - Monitoring
  - Advocacy (global, national and local)
- Early adopters to address issue comprehensively include Ethiopia, Sierra Leone and Zambia

New WHO Guidelines on Hand Hygiene in Health Care in the Context of Filovirus Disease Outbreak Response


GUIDELINE ON HAND HYGIENE IN HEALTH CARE
IN THE CONTEXT OF FILOVIRUS DISEASE
OUTBREAK RESPONSE

RAPID ADVICE GUIDELINE

NOVEMBER 2014

1. **Are chlorine solutions effective for hand hygiene in health care?**
2. **Are chlorine solutions effective for disinfection of gloves?**
3. **Does the use of chlorine solutions for hand hygiene cause health workers' skin irritation or lesions, respiratory side effects or any other adverse reactions?**
4. **Does glove disinfection with chlorine solutions cause damage to glove permeability or increased perforations?**

Guideline development process

- Development of key research questions
- Systematic literature reviews
- Evidence-to-recommendations approach using the GRADE framework
- Expert consultation
- WHO Guideline Review Committee

Issued in December 2014

http://www.who.int/mediacentre/news/releases/2014/ebola-ppe-guidelines/en/

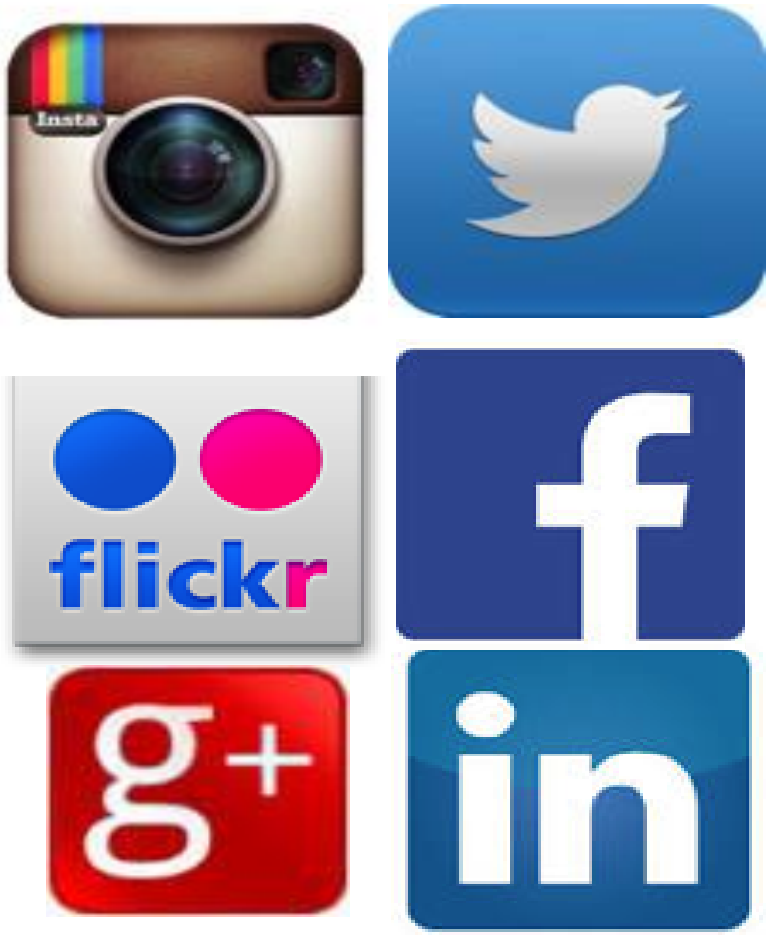
Local production of alcohol-based WHO formulation,
Monrovia, Liberia, November 2014 *(Courtesy Dr Olivier Hagon)*

Support: CleanHandsSaveLives.org and Swiss National Aid

JOIN US!

Info&Tools – 5 May – SAVE LIVES: Clean Your Hands
http://www.who.int/gpsc/5may/en/

POST YOUR PHOTOS/SELFIES at:
http://cleanhandssavelives.org



Follow, like and spread

@didierpittet

@GLOBAL_POPS

@WHO

who.int/5may/en/

CleanHandsSaveLives.org

#safeHANDS

Private Organizations for Patient Safety

CleanHandsSaveLives.org

WAR TO WASH – THE CASE FOR HAND HYGIENE IN POST CONFLICT SETTINGS (AFGHANISTAN)

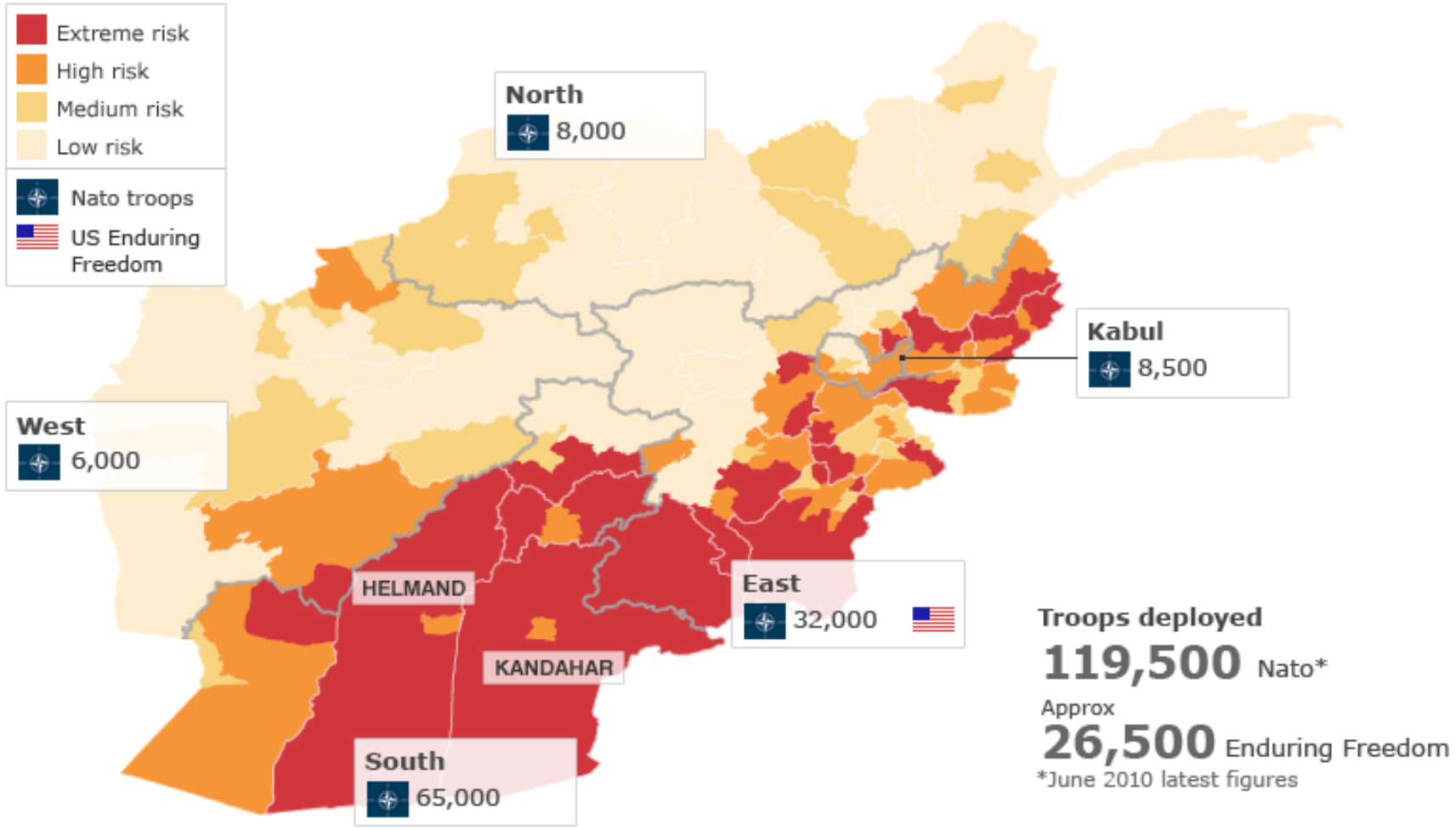
CYRUS ENGINEER, EX-COUNTRY DIRECTOR & ASSISTANT PROFESSOR, JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH, DIRECTOR, HEALTH CARE MANAGEMENT, TOWSON UNIVERSITY

OVERVIEW

- Afghanistan – Context and healthcare delivery system
- Monitoring and Evaluation project - Johns Hopkins
- Hand Hygiene – Opportunities and Challenges

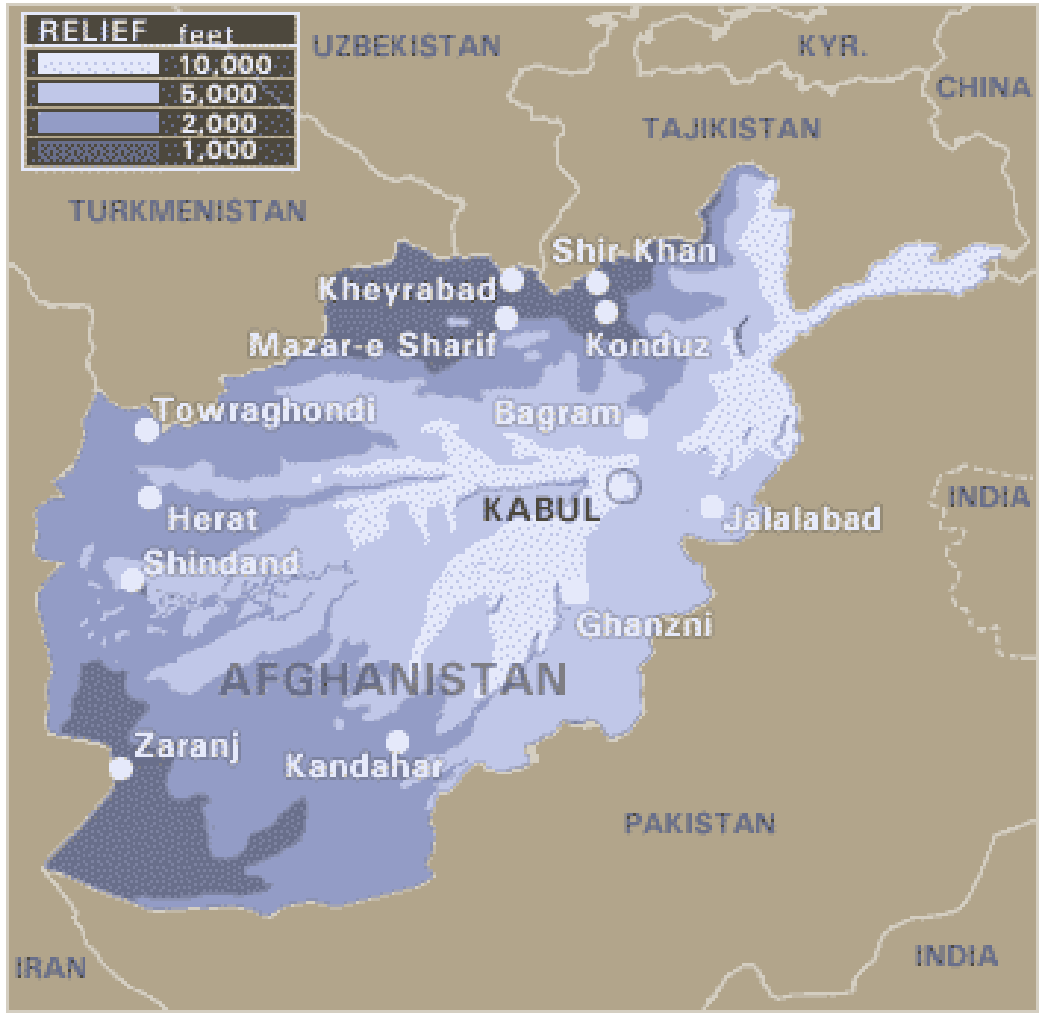

AFGHANISTAN
Political Map
N
UZBEKISTAN
TAJIKISTAN
CHINA
TURKMENISTAN
IRAN
PAKISTAN
INDIA
JOWZJAN
Sheberghan
Mazari Sharif
BALKH
KUNDUZ
Kunduz
TAKHAR
Taluqan
Fayzabad
BADAKHSHAN
FARYAB
Meymaneh
Sari pol
Aybak
Pol-e Khomri
SAMANGAN
BAGHLAN
SARE POL
NURESTAN
BADGHIS
Qala-i-Naw
PARVAN
Nuristan
KONAR
Asadabad
KAPISA
BAMYAN
Bamyan
Chaghcharan
KABUL
LAGHMAN
Hirat
HERAT
GHOR
WARDAK
Jalalabad
LOGAR
NANGARHAR
DAYKUNDI
Ghazni
PAKTIA
Gardez
Khost
KHOST
GHAZNI
Sharan
ORUZGAN
Tirin Kot
FARAH
Farah
Qalat
PAKTIKA
ZABOL
Lashkar Gah
Kandahar
Zaranj
HELMAND
NIMRUZ
KANDAHAR
LEGEND
International Boundary
Provincial Boundary
National Capital
Provincial Capital
0 50 100Km
Copyright © 2013 www.mapsofworld.com
(Updated on 20th March, 2013)

AFGHANISTAN: SECURITY MAP (2011)
INSECURITY – A MAJOR CHALLENGE



Source: UN/Isaf/US Government

AFGHANISTAN – COUNTRY CONTEXT



- **Capital**: Kabul
- **Area**: 251,825 sq mi; slightly smaller than Texas, highly mountainous terrain
- **Population**: 31,056,997 (July 2006 estimate)
  80% Sunni Muslim, 19% Shia Muslim
- **Main ethnic groups**: Pashtun, Tajik, Hazara, Uzbek
- Labor force: Over 80% in agriculture (farming, sheep, goats)
- Covered by an estimated 5-7 million landmines
- Leading illicit opium producer in 2005 supplying 89% of the opium produced in the world. 1/3 of the GDP comes from opium trade

AFGHANISTAN – COUNTRY CONTEXT (CONTD.)

Demographic & Health Indicators	Values	Source
Population (thousands) 2011, total	32358	UNICEF
Population (thousands) 2011, under 18	17219	UNICEF
Population (thousands) 2011, under 5	5686	UNICEF
Population annual growth rate (%), 1990-2011	4	UNICEF
Population annual growth rate (%), 2011-2030	3	UNICEF
Crude death rate, 2011	16	UNICEF
Crude birth rate, 2011	43	UNICEF
Life expectancy, 2011	49	UNICEF
Total fertility rate, 2011	6	UNICEF
Urbanized population (%), 2011	24	UNICEF
Infant mortality rate (per 1,000 live births)	77	AMS 2010
Maternal mortality ratio	327	AMS 2010
DPT 3 coverage (%)	35	MICS 2010/11
Fully immunized (12-23 months((%)	18	MICS 2010/11

Compare with

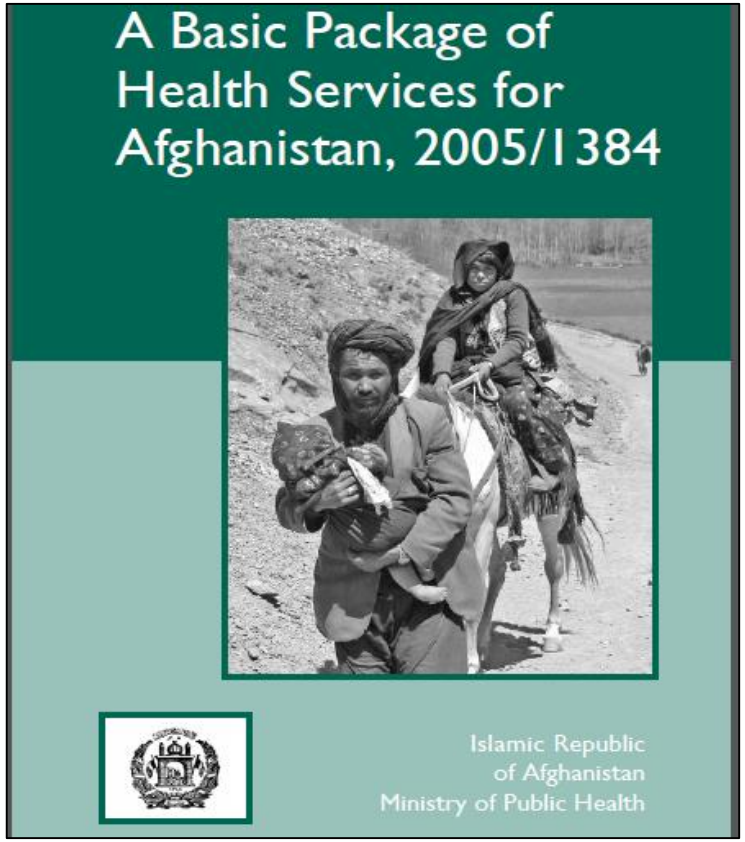
IMR (2001)
165 per 1,000 *

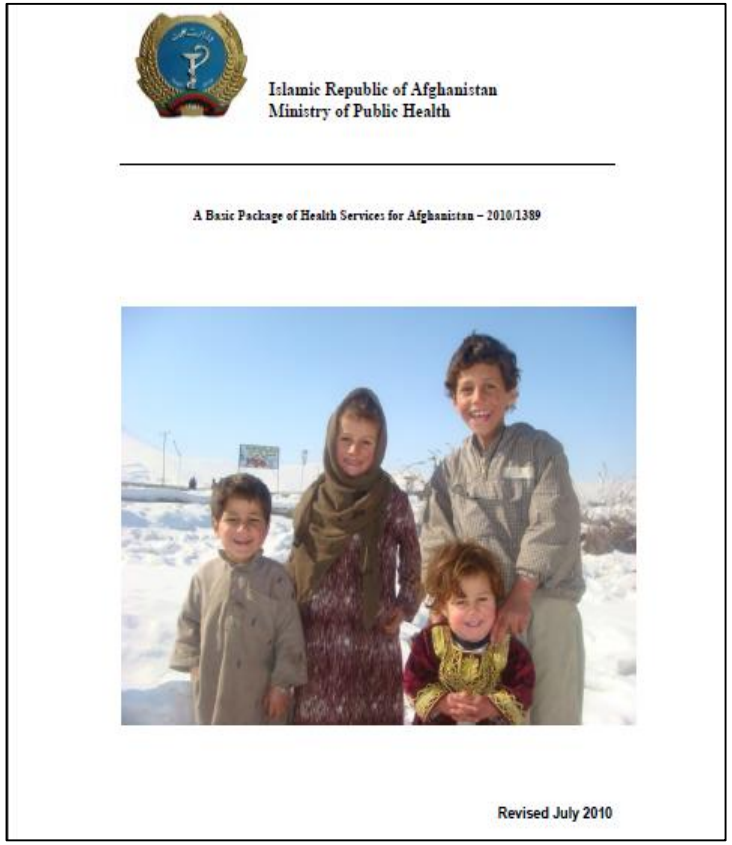
MMR (2002)
1600 per 100,000 live births **

MMR (2002) of a district in Badakshan = 6400 per 100,000 live births **

* UNICEF ** CDC / UNICEF

Primary Health Care – The Backbone of any country's health system





BPHS AND EPHS

- Basic Package of Health Services (BPHS) – Primary Care (Basic Health Centers, Sub centers, Comprehensive Health Centers)
- Essential Package of Health Services (EPHS)
  - Hospital based services

JHU'S MONITORING AND EVALUATION

- Independent third party (contracted out)
- Health Services Delivery
  - Balanced Score Card Approach
  - 2004 - 2013
  - Monitor delivery of basic health care services in 34 provinces
- Population level
  - Household surveys

AFGHANISTAN – HOSPITAL ASSESSMENT, 2012-2013

- The Balanced Scorecard Report for Afghanistan hospitals
- Sample size: 97
- Types of hospitals:
  - Kabul hospitals (KHs)
  - District Hospitals (DHs)
  - Provincial hospitals (PHs) and
  - Regional hospitals (RHs)

DOMAINS OF ASSESSMENT

- **Domain A: Client and Communities**
- **Domain B: Human resources**
- **Domain C: Physical Capacity**
- **Domain D: Quality of Service Provision**
- **Domain E: Management Systems**
- **Domain F: Functionality Indicators**
- **Domain G: Ethics and Values**

DOMAIN C – PHYSICAL CAPACITY

- 4 sub-domains:
  - C1- Communications and Functional transportation
  - C2-Infrastructure
    - Infrastructure index
  - C3-Supplies, Drugs, and Equipment
  - C4: Service Availability

DOMAIN C – PHYSICAL CAPACITY

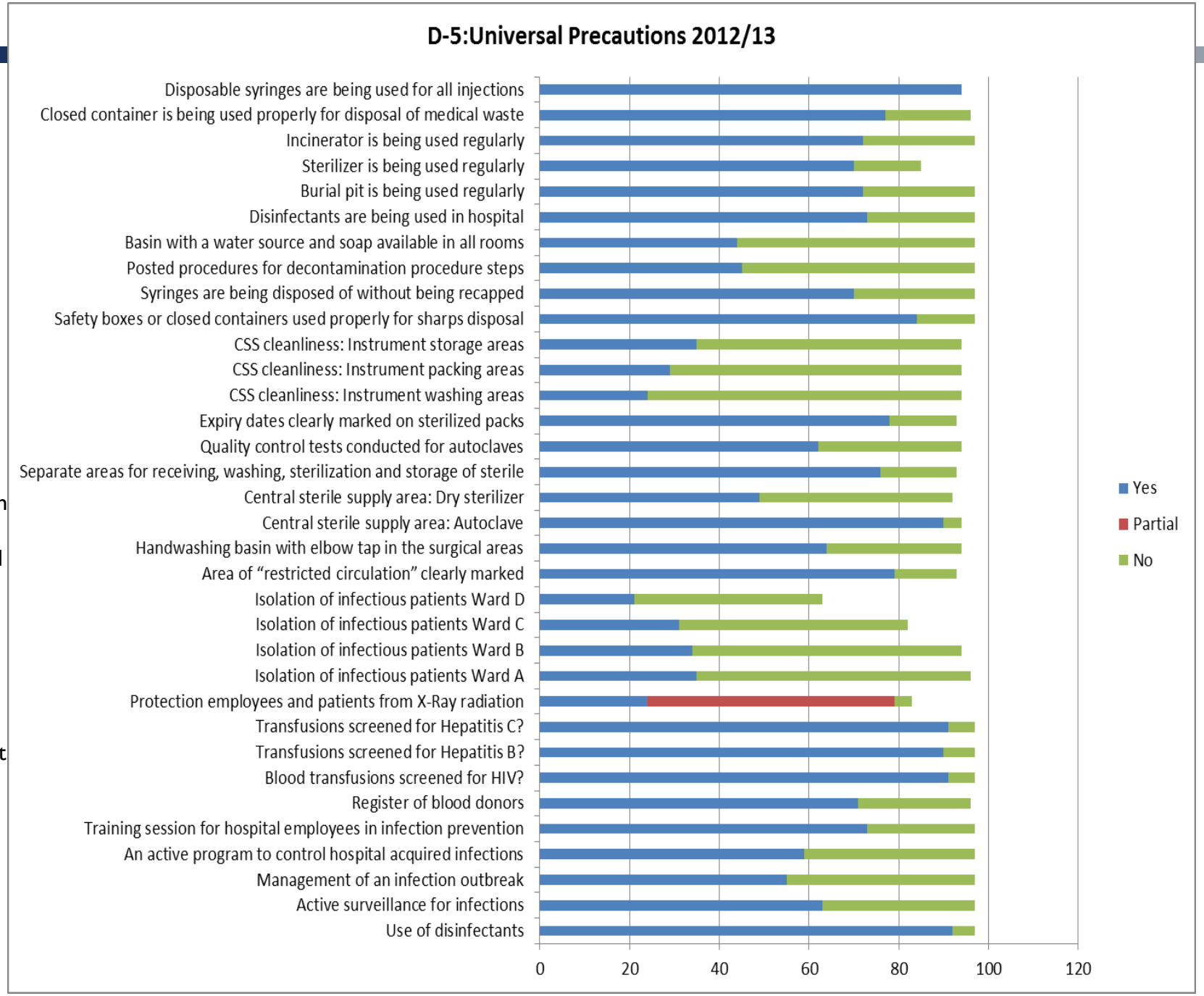
C1: Communications and Transport	This sub-domain consists of one index which assesses the functional transportation, and communications facilities.
C2: Infrastructure	This sub-domain consists of one index which asses the adequacy of the physical structure and utilities of the hospital.
C3: Supplies: Drugs and Equipment	This sub-domain includes two indices which assess the presence, adequacy, and functionality of available drugs and equipment.
C4: Service Availability	This sub-domain includes six indices which assess the provision of services.

Source: Essential Package of Health Services Balanced Score Card Report 2012-2013, MoPH Afghanistan)

	LBM	UBM	DH Median	PH Median	RH Median	KH Median
Domain C: Physical Capacity						
C1: Communications and Transport						
C-1: Communications and Transport	75.0	100.0	100.0	87.5	100.0	100.0
C2: Infrastructure						
C-2: Infrastructure Index	66.7	93.3	76.7	87.5	93.8	81.3
C3: Supplies-Drugs and Equipment						
C-3: Equipment Functionality Index	66.4	78.3	75.2	82.8	79.8	64.9
C-4: Pharmaceuticals Availability Index	68.4	91.5	87.9	90.6	85.5	69.5
C4: Service Availability						
C-5: Lab and X-ray Index	79.5	93.3	86.4	87.0	95.7	73.9
C-6: Clinical Guidelines Index	55.6	94.4	88.9	88.9	88.9	42.9
C-7: Record System Index	72.9	95.6	85.0	92.4	93.8	94.8
C-8: Hotel Services	10.5	73.7	20.3	47.1	64.2	26.1
C-9: Safety precautions	28.2	61.1	38.7	56.3	65.4	58.8
C-10: Female Friendly Facilities	39.4	66.2	41.3	56.2	77.1	69.2

DOMAIN D – QUALITY OF SERVICE PROVISION

- 2 sub-domains:
  - Enabling Environment (Systems present to deliver quality services)
  - Quality of Care (direct observation of provider-patient interaction to assess quality of care delivered)
    - Client history and Physical exam
    - Client counseling
    - Universal precautions



Source: Essential Package of Health Services Balanced Score Card Report 2012-2013, MoPH Afghanistan)

Source: www.who.int

Photo credits: MSH (Afghanistan, WASH Campaign)

SUMMARY – HAND HYGIENE

- Slow Progress Areas
  - Surgical Areas of hospitals
  - Running water, taps, basins in hospitals
  - Awareness on the rise
- Challenges (opportunities for improvement)
  - Little or no systematic measurement yet
  - Promotion dependent on funding/NGO priorities
  - Limited resources and a lot to do !

HEALTH SYSTEM CHALLENGES

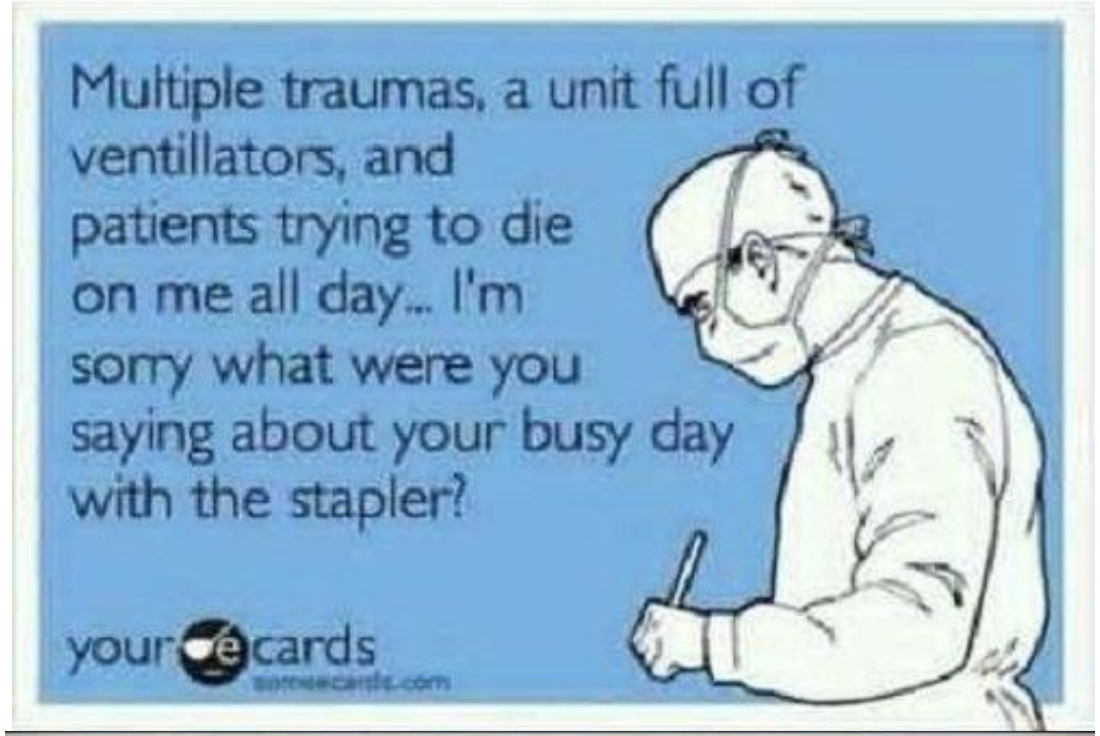
- Health System Level
  - Infrastructure Limited
  - Fragmentation
  - Donor funding
  - Equity
  - Workforce Shortages (insufficient female health workers, cultural restrictions on women)
  - Literacy
  - Security

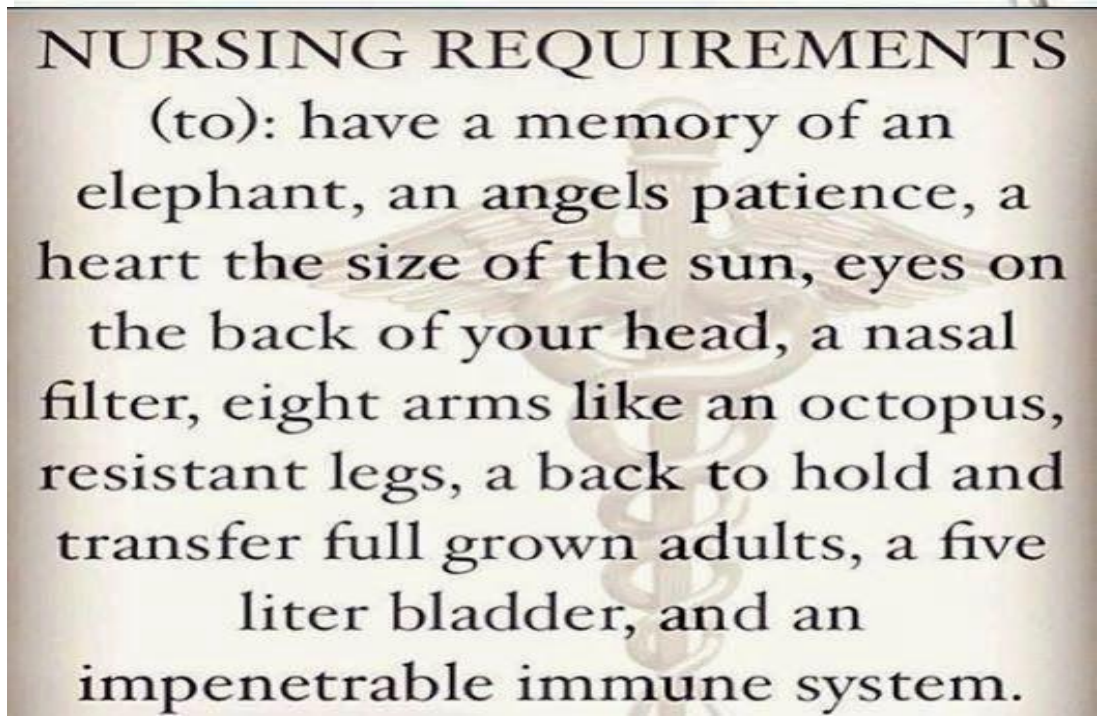
Thank you !

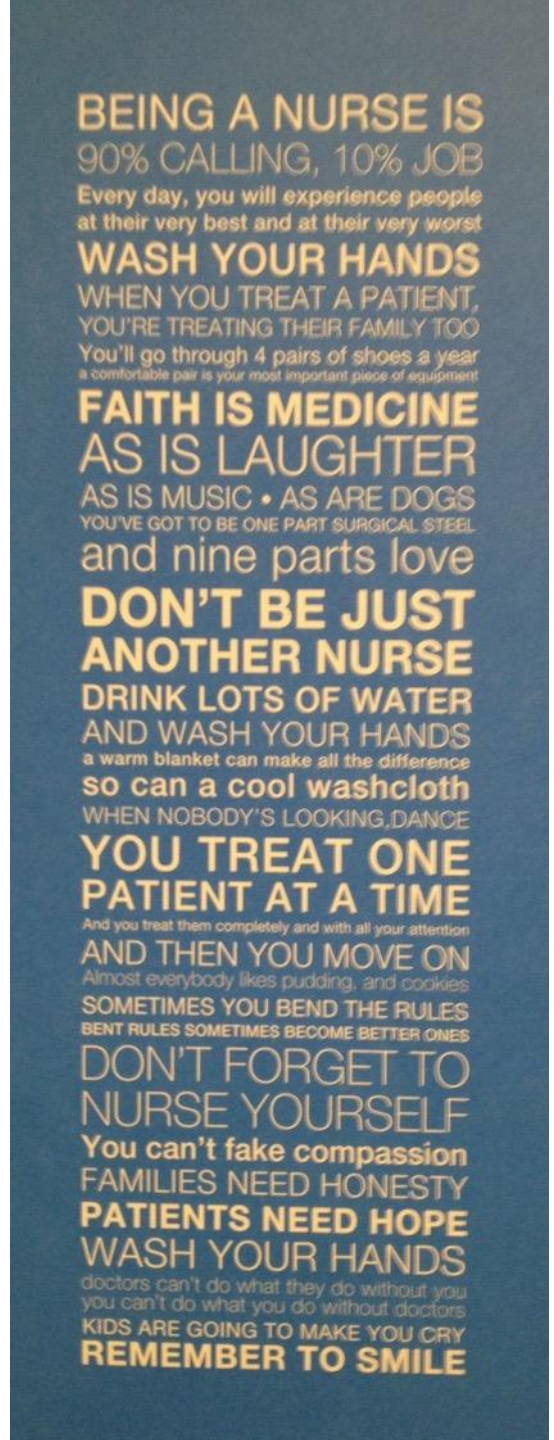
"BEING A NURSE ISN'T ABOUT GRADES.
IT'S ABOUT BEING WHO WE ARE.
NO BOOK CAN TEACH YOU HOW TO
CRY WITH YOUR PATIENT.

NO CLASS CAN TEACH YOU HOW TO
TELL THEIR FAMILY THAT THEIR
PARENTS HAVE DIED OR ARE DYING.
NO PROFESSOR CAN TEACH YOU HOW TO
FIND DIGNITY IN GIVING SOMEONE A BED BATH.

A NURSE IS NOT ABOUT THE PILLS OR
THE CHARTING. IT'S ABOUT BEING ABLE
TO LOVE PEOPLE WHEN THEY ARE AT
THEIR WEAKEST MOMENTS."


Multiple traumas, a unit full of ventillators, and patients trying to die on me all day... I'm sorry what were you saying about your busy day with the stapler?
yourecards
someecards.com

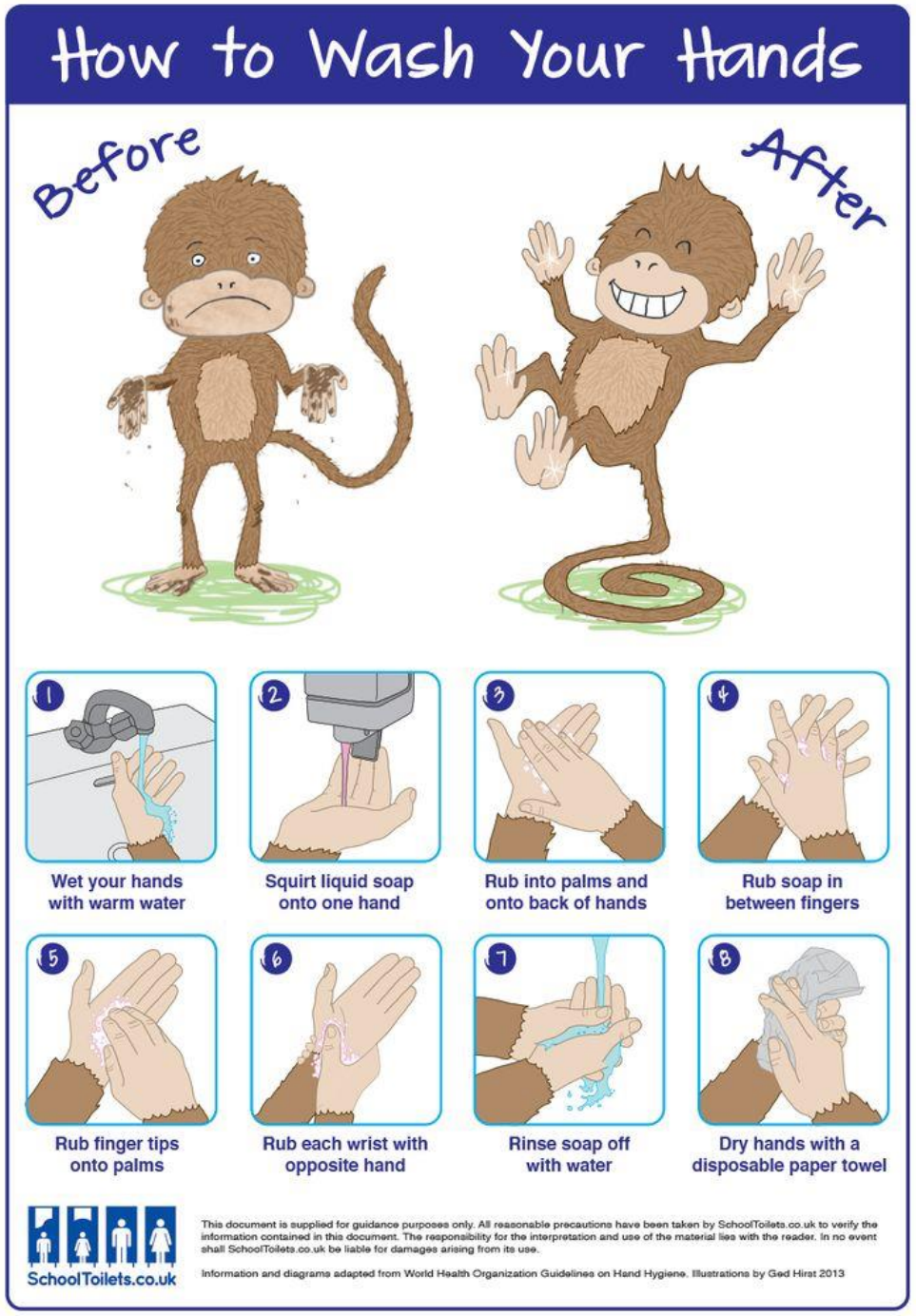

NURSING REQUIREMENTS
(to): have a memory of an elephant, an angels patience, a heart the size of the sun, eyes on the back of your head, a nasal filter, eight arms like an octopus, resistant legs, a back to hold and transfer full grown adults, a five liter bladder, and an impenetrable immune system.

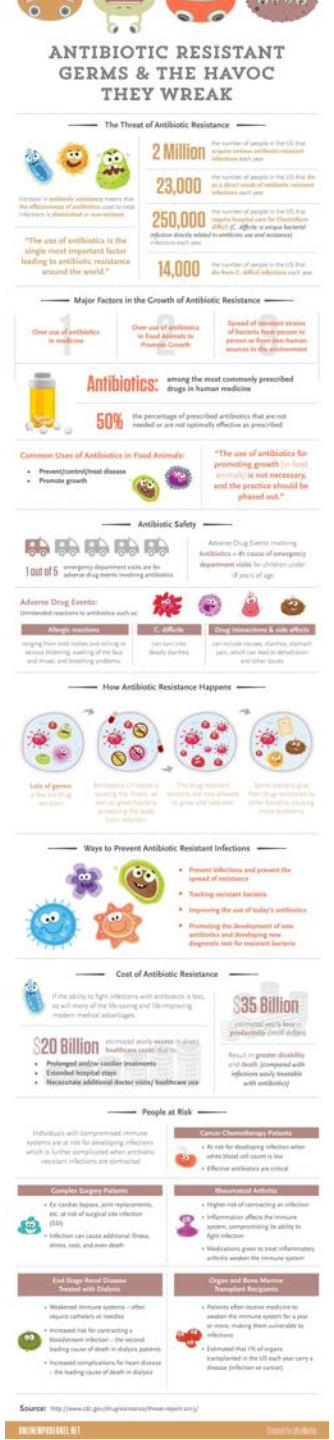

BEING A NURSE IS
90% CALLING, 10% JOB
Every day, you will experience people at their very best and at their very worst
WASH YOUR HANDS
WHEN YOU TREAT A PATIENT, YOU'RE TREATING THEIR FAMILY TOO
You'll go through 4 pairs of shoes a year
a comfortable pair is your most important piece of equipment
FAITH IS MEDICINE
AS IS LAUGHTER
AS IS MUSIC • AS ARE DOGS
YOU'VE GOT TO BE ONE PART SURGICAL STEEL
and nine parts love
DON'T BE JUST ANOTHER NURSE
DRINK LOTS OF WATER
AND WASH YOUR HANDS
a warm blanket can make all the difference
so can a cool washcloth
WHEN NOBODY'S LOOKING,DANCE
YOU TREAT ONE PATIENT AT A TIME
And you treat them completely and with all your attention
AND THEN YOU MOVE ON
Almost everybody likes pudding, and cookies
SOMETIMES YOU BEND THE RULES
BENT RULES SOMETIMES BECOME BETTER ONES
DON'T FORGET TO NURSE YOURSELF
You can't fake compassion
FAMILIES NEED HONESTY
PATIENTS NEED HOPE
WASH YOUR HANDS
doctors can't do what they do without you
you can't do what you do without doctors
KIDS ARE GOING TO MAKE YOU CRY
REMEMBER TO SMILE

- 60 times/hour
- Average compliance ≅ 40%

Factors reducing HHC: State of the art

- Institutional
  - Unit type
  - Job type
  - Understaffing
  - Lack of commitment to 'safety climate'
- Behavioural/Situational
  - Wearing gloves/protective gear
  - Inconvenient location of dispensers
  - Patient needs
  - 'Forgetfulness'
  - High work-load/'too busy'
- Bodily:
  - Dry/sticky hands
- Psychological (*positive* influence)
  - Perceiving oneself as role model
  - Peer pressure
  - Self-efficacy (to do HHC)
  - Perceived risk of infection
  - Perceived benefits of HHC against infection
  - Early learning about HWWS at home





What doesn't work


OH, NO!
NOT ANOTHER
POSTER ABOUT
HAND WASHING!

Also don't work

What works -- briefly

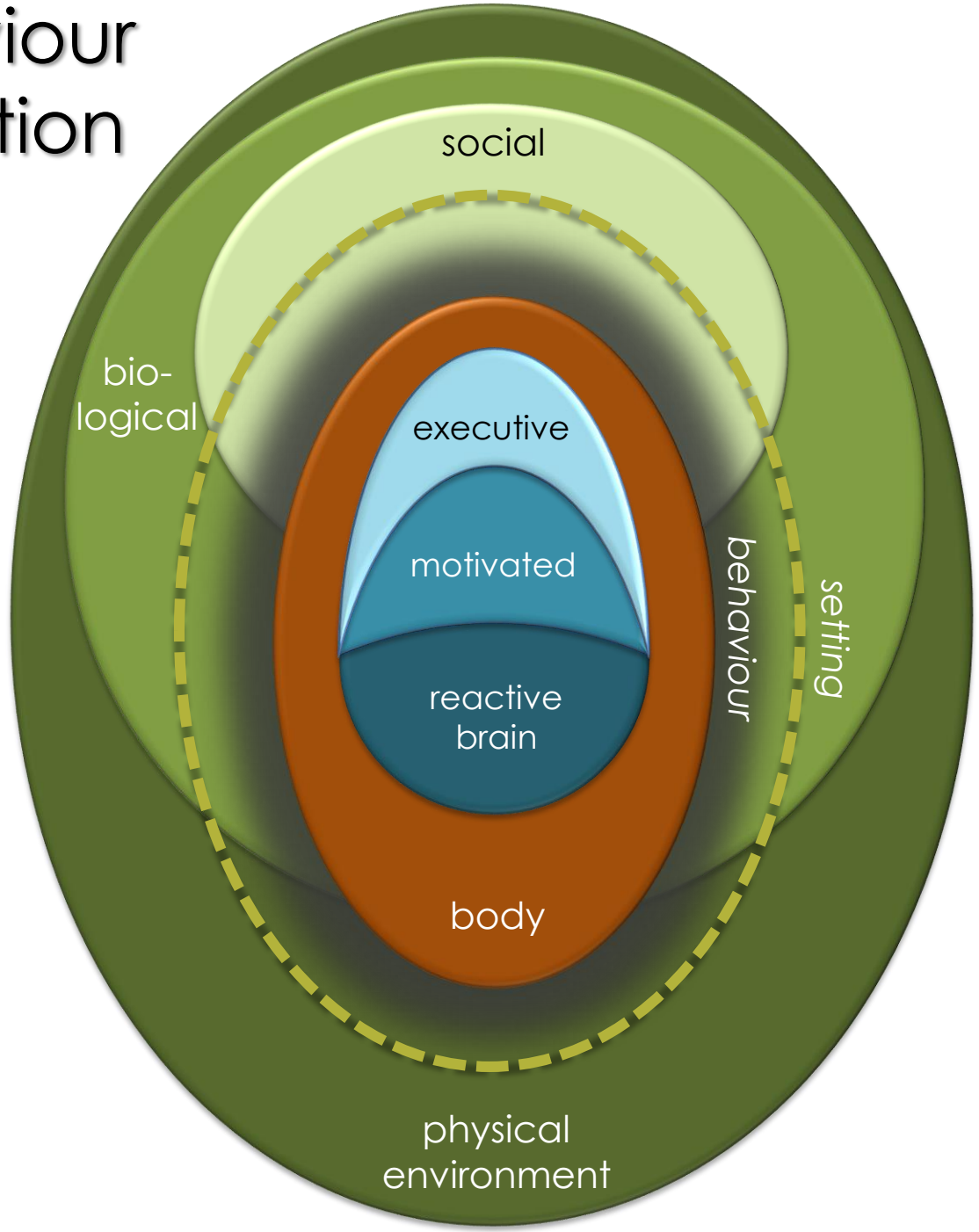
" THERE'S CONSEQUENCES IF SOMEONE ON THE FLOOR DOESN'T WASH THEIR HANDS. "

Behaviour Change Problem

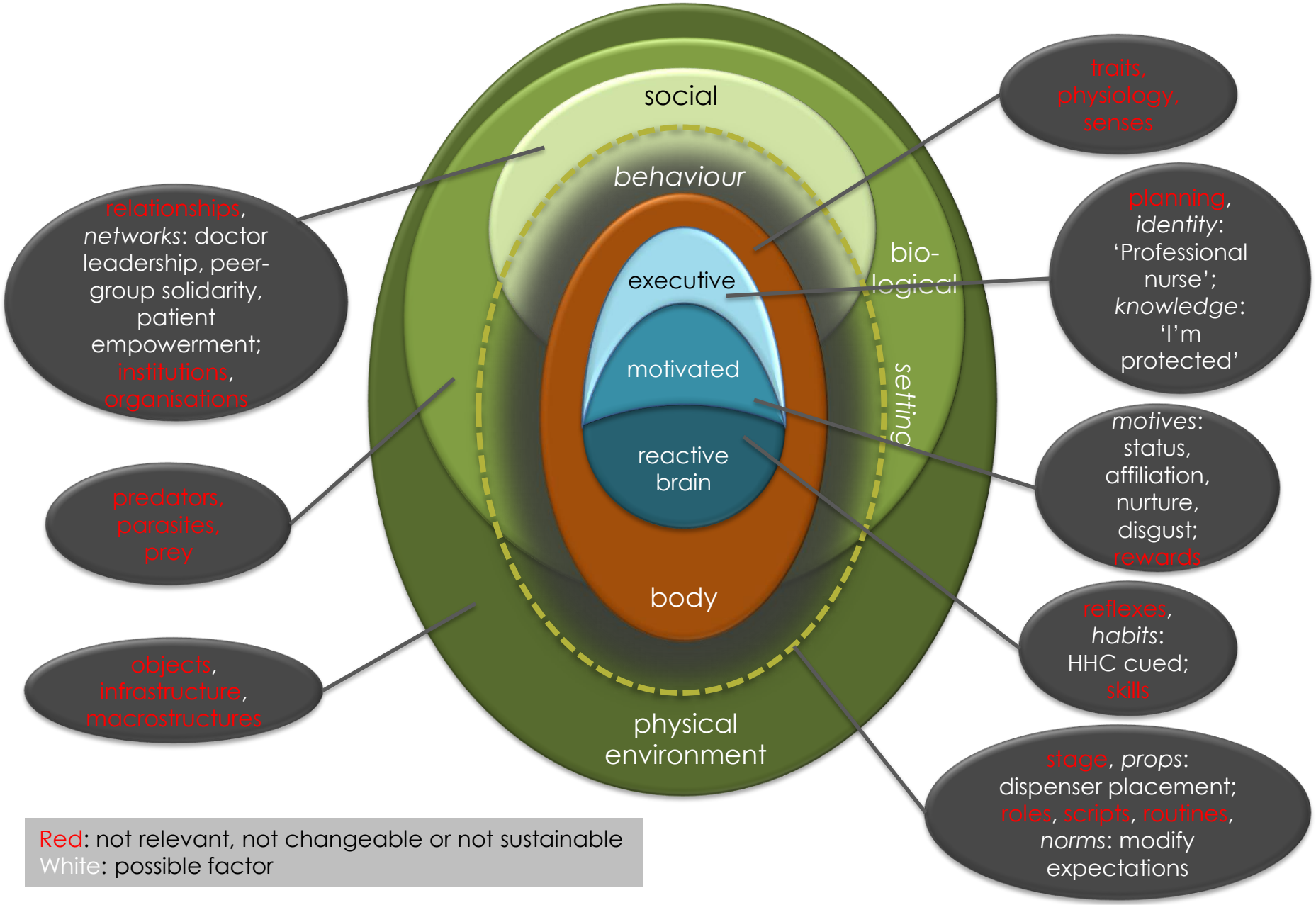
- **Institutional factors** can be associated with high long-term HHC, but are typically not manipulable.
- **Situational factors** are typically associated with low HHC, but not manipulable at scale or across situations.
- **Psychological factors** can be manipulated, but typically produce only temporary increases in HHC.
- Hence:

*Need to identify new, relevant, manipulable factors that will produce **sustained** increases in HHC*

BCD Behaviour Determination Model



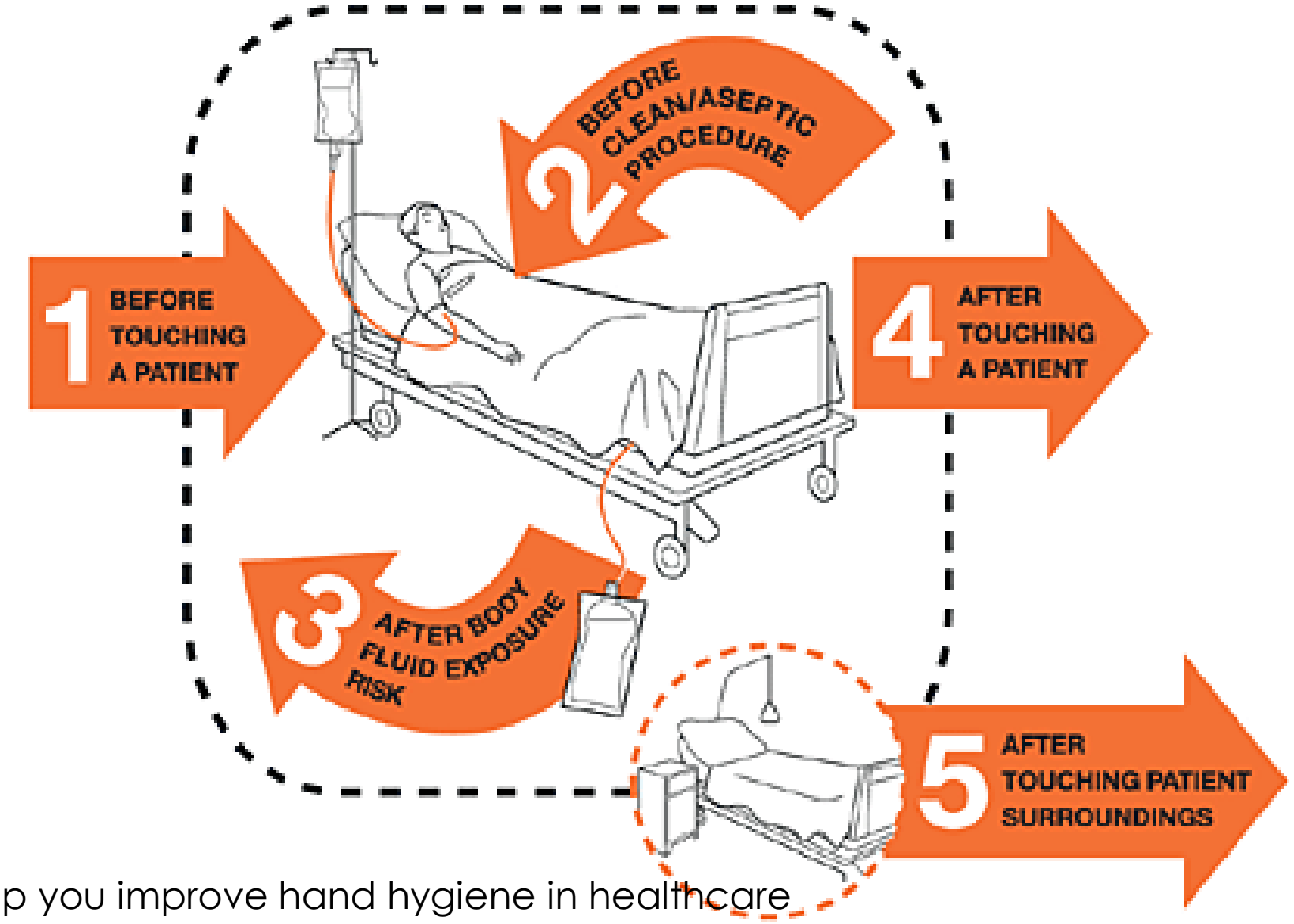
BCD HHC Analysis



Red: not relevant, not changeable or not sustainable
White: possible factor

BCD Resources

- Home page (with introduction, guide, example campaigns):
  - http://ehg.lshtm.ac.uk/behavior-centred-design/



WHO tools to help you improve hand hygiene in healthcare
http://www.who.int/gpsc/5may/tools/en/

Make hygiene happen: assess your readiness

People rarely move from current to ideal practices

Achieving excellent hand hygiene in healthcare is a continuum

Assess your readiness with the **WHO Hand Hygiene Self-Assessment Framework 2010**:

- Systems and hand hygiene infrastructure
- Training and education
- Evaluation and feedback
- Reminders in the workplace
- Institutional safety climate for hand hygiene

English/French/Spanish: http://www.who.int/gpsc/5may/hhsa_framework/en/

Make hand hygiene happen: small doable actions

For your healthcare facility:

1. Identify good hand hygiene practices that can be reinforced
2. Identify hand hygiene practices that are missing or can be improved
3. Identify incremental steps that:
    - move health workers from current practice to ideal practice
    - Have significant positive impact on health
    - Are feasible
4. Facilitate movement from step to step to achieve better hand hygiene, eg:
    - Sustainable hand hygiene facilities available, affordable, convenient
    - Education, promotion, role models, and motivation to instill a hand hygiene culture in your healthcare facility

Hygiene in the Post-2015 Agenda

- The United Nations is in the process of developing global goals and targets for post-2015
- The UNICEF/WHO Joint Monitoring Programme (JMP), A multi-stakeholder group, has recommended WASH targets and indicators
- Hygiene includes handwashing with soap and menstrual hygiene management
- Urge UN member states, donors, NGOs, and others to advocate for the inclusion of water, sanitation, ***and*** hygiene in post-2015 agenda

The Joint Monitoring Programme's WASH Recommendations

The Target

By 2030:

- to eliminate open defecation;
- to achieve universal access to basic drinking water, sanitation and **hygiene for households, schools and health facilities**;
- to halve the proportion of the population without access at home to safely managed drinking water and sanitation services; and
- to progressively eliminate inequalities in access.